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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,728	08/05/2005	Josef Speidl	P//3240-102	4308
2352 7590 12/18/2006 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER EL ARINI, ZEINAB	
			ART UNIT	PAPER NUMBER
			1746	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/18/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/536,728

Applicant(s)

SPEIDL, JOSEF

Examiner

Zeinab E. EL-Arini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 6-16, and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

The amendment and remarks filed on 10/23/06 have been acknowledged and entered.

Claim Rejections - 35 USC § 112

The rejection under 35 U.S.C. 112, second paragraph, stated in paper No. 20060804 has been withdrawn in view of applicant's amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-16, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvain (5,932,025) in combination with Wissmann et al. (6,427,706), Pugh et al. (5,566,694), Volz et al. (2004/0099292), and Ammermann et al. (5,579,788).

Re. claims 1, and 18-21, Sylvain discloses a device for effecting the continuous treatment of a metal strip by means of a treatment liquid, the metal strip being guided horizontally through at least one tank (4) for accommodating the treatment liquid. The device further comprises a pump circulation tank (1) for preparing or storing and holding the treatment liquid, which is arranged directly under the tank (see column 2, lines 6-32,

column 3, lines 16-26, 53-54, claims 1 and 2, Figures 2 and 3). The subject matter of claim 1 therefore differs from Sylvain system in that the pump circulation tank has a bottom, having a slope over the entire length, the slope being aligned in the strip running direction and transversely in relation to the strip running direction.

Pugh et al. disclose a device for effecting the continuous treatment of steel strips, especially for pickling, with a pickling vessel or shallow tank (20) made of plastic, which is adjoined at both ends by end chambers or run-off chambers (12, 14), which have a run-in and a run-out for the metal strip and also an outflow for the pickling liquid and are likewise produced from plastic (see column 1, lines 1-10, claims 1 and 2, Figures 1, 2 and 4). Furthermore Pugh et al. disclose that a thermal expansion of the shallow tank (20) is made possible, and that the shallow tank (20) is formed with expandable lines (see col. 2, lines 3- 22, claims 2-12). Pugh et al. disclose that the bottom surfaces of the tanks being inclined in the direction of the run-off (see col. 4, lines 30-31, Figs 2-4).

Volz et al. disclose surface treatment plant for strips that are continuously fed through a tank filled with the treatment liquid. Volz et al. disclose the bottom surface of the tanks being in the transverse direction (see the abstract, and Fig. 4).

Wissmann et al. disclose a device for effecting the continuous treatment of steel strips, especially for pickling, with a treatment vessel or tank (1), squeeze rolls being provided at the ends of the tank and arranged in a container or run- off chamber (13) (see col. 1, lines 19-30, claim 1), and the tank (1) and the run-off chambers (13) being connected to a connecting shaft (15) or telescopic shaft (17), in order that a compensation for expansion is achieved (see claims 1 and 18). Wissmann et al. also

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disclose that a run-off (8, 9) is provided at least one end of the tank (1) (see col. 1, lines 40-46, claim 3, Figures 1 and 2).

Ammermann et al. disclose an apparatus for the surface treatment to be treated by means of a treatment liquid. See the abstract, and Fig. 1.

It would have been obvious for a person skilled in the art who would like quicker complete emptying of the pump circulation tank to use the bottom surface of Pugh et al. and Volz et al. in the device Sylvain to obtain the device according to claim 1.

Re. claim 16, Sylvain discloses a method for modifying a treatment device, the deep tank being removed and a shallow tank and a pump circulation tank being installed in its place, and the pump circulation tank being arranged directly under the shallow tank (see column 1, lines 62-66, column 2, lines 1-15, claims 1-3). The subject matter of claim 16 therefore differs from Sylvain method in that the pump circulation tank has a bottom, having a slope over the entire length, the slope being aligned in the strip running direction and transversely in relation to the strip running direction.

It would have been obvious for one skilled in the art to use the bottom surface taught by Pugh et al. and Volz et al. in the Sylvain system to quicker complete emptying of the pump circulation tank and to improve the cleaning process.

The main features of claims 2 and 3, that the tank (1) is configured as a shallow tank with at least one cover, are already disclosed in Sylvain (see column 3, lines 27-31, column 4, lines 49-50).

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The main features of claims 4 and 5, that the tank (1) is structurally mounted on at least one pump circulation tank (3), and accordingly the tank (1) and the pump circulation tank (3) form a unit, are already disclosed in Sylvain (see column 3, lines 16-20, 53-54).

The main feature of claim 1, that the tank (1) and the at least one pump circulation tank (3) are provided with a seal, one skilled in the art would use seal in contact surface of the treatment tank and the circulation tank to prevent any leak between the tanks.

The main feature of claim 7, that the bottom (9) of the tank (1) forms the cover for the at least one pump circulation tank (3), is already disclosed in Sylvain (see Fig. 3).

Re. claim 8, the selection of the material for the tank (1) and the pump circulation tank (3) to be made of plastic, preferably polypropylene, is sufficiently known in the technical field with regard to the desired effect, that is to say better resistance to the corrosive attack of the treatment liquid or pickling liquid (see Wissmann et al. column 1, lines 47-54, claim 4, and Pugh et al. column 5, lines 8-15, claim 12).

The main feature of claim 9, that the tank (1) and the at least one pump circulation tank (3) are produced from rubberized steel, is already disclosed in Sylvain (see column 3, lines 11-15, 35-38).

Re claim 10, Wissmann et al. disclose a device for effecting the continuous treatment of steel strips, especially for pickling, with a treatment vessel or tank (1), squeeze rolls being provided at the ends of the tank and arranged in a container or run-off chamber (13) (see col. 1, lines 19-30, claim 1), and the tank (1) and the run-off chambers (13) being connected to a connecting shaft (15) or telescopic shaft (17), in

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order that a compensation for expansion is achieved (see claims 1 and 18). Wissmann et al. also disclose that a run-off (8, 9) is provided at least one end of the tank (1) (see col. 1, lines 40-46, claim 3, Figures 1 and 2). Pugh et al. disclose a device for effecting the continuous treatment of steel strips, especially for pickling, with a pickling vessel or shallow tank (20) made of plastic, which is adjoined at both ends by end chambers or run-off chambers (12, 14), which have a run-in and a run-out for the metal strip and also an outflow for the pickling liquid and are likewise produced from plastic (see column 1, lines 1-10, claims 1 and 2, Figures 1, 2 and 4). Furthermore Pugh et al. disclose that a thermal expansion of the shallow tank (20) is made possible, and that the shallow tank (20) is formed with expandable lines (see col. 2, lines 3- 22, claims 2-12).

The invention according to claim 11, that the run-off (6) is arranged centrally in the tank (1), seen in the strip running direction, is already described in document Volz et al. (see col. 4, lines 8-14, claim 10, Figure 5).

The invention according to claim 12, that the tank (1) has a bottom sloping down toward the run-off, is already described in document Volz et al. (see Fig. 5), and in Ammermann et al. (see col. 3, lines 43-44, Figure 3).

Re claim 13 it relates to a slight structural modification of the pickling device according to Pugh et al. (see Pugh et al. col. 3, lines 44-58, col. 4, line 1 – col. 5, line 7, Figures 1 and 4, claims 3, 4, 5 and 8) and Ammermann et al. (see col. 2, lines 56-67, col. 3, lines 1-30, Figures 1, 2 and 3, claims 1, 5, 6, 12), which is within the bounds of what a person skilled in the art is accustomed to doing on the basis of the

considerations that are evident to him, especially since the advantages thereby achieved can be readily foreseen.

Re claim 14, it is generally known to a person skilled in the art that the feature that for ventilating and venting the pump circulation tank (3), at least one connecting Line (14) is arranged between the pump circulation tank (3) and the tank (1), is equivalent to the feature known from Ammermann et al. (see col. 3, lines 16-21), that venting of the treatment liquid from the inner space of a vessel is possible via a closable throttle valve, and if need be can be exchanged for this feature.

The main feature of claim 15, that the treatment liquid is delivered from the at least one pump circulation tank (3) into the tank (1) by means of pumps, is already disclosed in Sylvain (see col. 3, lines 63-67, col. 4, lines 1-20, claims 2, 5 and 6).

Response to Arguments

3. Applicant's arguments filed 10/23/06 have been fully considered but they are not persuasive. Applicant's argument with respect to non of the cited art teach the contact surface between the treatment tank and the circulation tank comprises a seal is unpersuasive, because it is obvious design choice to use seal in the surface between the treatment tank and the circulation tank to prevent the leaks between said tanks.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeinab E. EL-Arini whose telephone number is (571) 272-1301. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zeinab E. EL-Arini

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Primary Examiner
Art Unit 1746

ZEE
12/13/06